Marked Up Version Of The Pending Claims under 37 C.F.R. 1.121(c)(1)(ii): In accordance with 37 C.F.R. 1.121(c)(1)(ii), the Applicant submits the following marked up version only for claims being changed by the current amendment, wherein the markings are shown by strikethrough (for deleted matter) and/or underlining (for added matter):

Amendment to the Claims

1. (Currently Amended) A communication system, comprising:

(a) a digital data input source;

(b) a modulator for modulating the digital data input source;

(c) an encoder for encoding the modulated digital data input source;

(d) a decoder for decoding a received encoded signal;

(e) a demodulator for demodulating the decoded received encoded signal; and

(f) a data transmission link for coupling the encoder and the decoder;

wherein the communication system transmits mass quantities of digital data through the data transmission link at high-rates of speed by way of modulating and encoding the data bits/samples[[.]] ;

wherein the encoder adapts the digital data by separating the digital data into forward and conjugate pulse positions over a transmission channel.

2. (Original) The system according to claim 1, wherein the forward and conjugate pulses are generated by a mono-shot pulse generator.

3. (Original) The system according to claim 1, wherein the modulator splits the input digital data bits/samples into a plurality of data bit/sample sets.

4. (Currently Amended) The system according to claim 1, ~~wherein the encoder adapts the data by separating the data into forward and conjugate pulse positions over a transmission channel.~~ further comprsing:

analog to digital converter for converting an analog signal to a digital signal.

5. (Currently Amended) The system according to claim 1, wherein the decoder adapts the received ~~data~~ encoded signal between the forward and conjugate pulses in the encoded signal.

6. (Original) The system according to claim 1, wherein the decoder uses thin pulses for forward pulse position coding and relatively thicker pulse for conjugate pulse position coding.

7. (Currently Amended) The system according to claim 1, wherein the demodulator recombines the forward and conjugate pulses into ~~the~~ a desired digital output.

8. (Currently Amended) A method for transmitting mass quantities of digital data through a data transmission link at high-rates of speed in a communication system including:

(a) splitting ~~the~~ an input digital data bits/samples into a plurality of data bit/sample sets;

(b) encoding forward and conjugate pulse position over ~~the~~ a transmission channel;

(c) decoding the pulsed data to discriminate between the forward and conjugate pulses in a signal; and

(d) demodulating the data to recombine the forward and conjugate pulses into the desired digital output[[.]] ;

wherein the encoding includes adapting the plurality of data bit/sample sets by separating the plurality of data bit/sample sets into forward and conjugate pulse positions over a transmission channel.

~~8.~~ 9. (Currently Amended) The method according to claim ~~7~~ 8, wherein a thin pulse is used for forward pulse position coding and a relatively thicker pulse is used for conjugate pulse position coding.

~~9.~~ 10.(Currently Amended) The method according to claim ~~7~~ 8, wherein the forward and conjugate pulses are generated by a mono-shot pulse generator.

~~10~~. 11. (Currently Amended) A communication system, comprising:

a digital data input source;

a modulator for modulating the digital data input source;

an encoder for encoding the modulated digital data input source;

a decoder for decoding a received encoded signal;

a demodulator for demodulating the decoded received encoded signal; and

a data transmission link for coupling the encoder and the decoder; and

means for transmitting mass quantities of digital data through a data transmission link at high-rates of speed by way of modulating and encoding the data bits/samples[[.]];

wherein the encoding includes separating the modulated digital data input source into distinct positions over a transmission channel.

~~11.~~12. (Currently Amended) The ~~means~~ system according to claim ~~10~~ 11, wherein a thin pulse is used for forward pulse position coding and a relatively thicker pulse is used for conjugate pulse position coding.

~~12.~~13. (Currently Amended) The ~~means~~ system according to claim ~~10~~ 11, wherein the forward and conjugate pulses are generated by a mono-shot pulse generator.

~~13.~~14. (Currently Amended) The ~~means~~ system according to claim ~~10~~ 11, wherein ~~a subsystem of~~ the means splits the input digital data bits/samples into a plurality of data bit/sample sets.

~~14.~~15. (Currently Amended) The ~~means~~ system according to claim ~~10~~ 11, wherein ~~a subsystem of~~ the means adapts the data by separating the data into forward and conjugate pulse positions over a transmission channel.

~~15.~~16. (Currently Amended) The ~~means~~ system according to claim ~~10~~ 11, wherein ~~a subsystem of~~ the means adapts the received data between the forward and conjugate pulses in the encoded signal.

~~16.~~17. (Currently Amended) The ~~means~~ system according to claim ~~10~~ 11, wherein ~~a subsystem of~~ the means uses thin pulses for forward pulse position coding and relatively thicker pulse for conjugate pulse position coding.

~~17.~~18 (Currently Amended) The ~~means~~ system according to claim ~~10~~ 11, wherein ~~a subsystem of~~ the means recombines the forward and conjugate pulses into the desired digital output.

19. (New) The system according to claim 11, the system further comprising:

an analog to digital converter for converting an analog input signal into a digital signal.

20. (New) The system according to claim 19, the system further comprising:

data splitter for splitting the digital input signal into a plurality of data bit/sample sets;